Indiana State Trauma Care Committee

February 16, 2018



Introductions & approval of meeting minutes



Updates

Katie Hokanson, Director of Trauma and Injury Prevention



Email questions to: indianatrauma@isdh.in.gov

Trauma center verification

 Congratulations Franciscan Health – Crown Point!



Division staffing updates

- Jeremy Funk
 - Injury prevention epidemiologist
- Carrie Bennett
 - Resources and Records Consultant



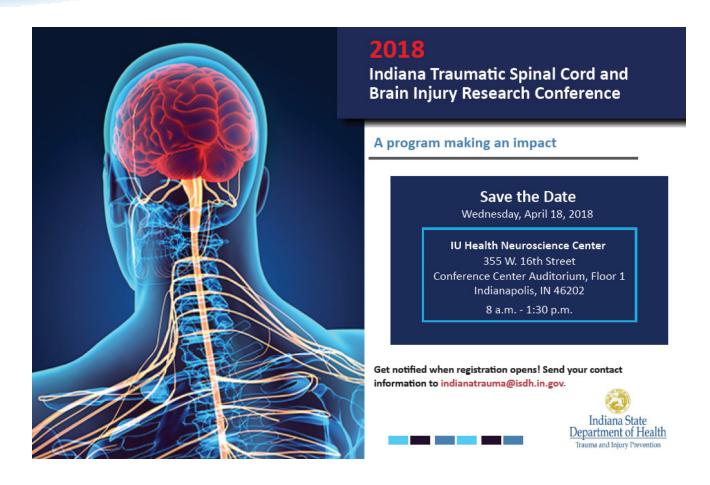
Stand By the Standing Order: Naloxone Fundamentals for Dispensing Entities

Tuesday, Feb. 20 10-11 a.m. (EST)



This webinar will cover comprehensive information regarding the naloxone standing order that is pertinent to every entity that dispenses naloxone to the public, including pharmacies, non-profits, schools and local health departments. It will also cover an overview of optIN, the online registry that such entities must register with.

Traumatic Spinal Cord and Brain Injury Research Conference



American Trauma Society: Trauma registry course



Registration is open on the website

Date: March 8-9, 2018

Location: Indiana State Department of Health

www.amtrauma.org

@ATStrauma

info@AMTauma.org

info@AM

800-556-7890

COMPREHENSIVE EDUCATION FOR THE TRAUMA REGISTRY EXPERT

AMERICAN TRAUMA SOCIETY - TRAUMA REGISTRY COURSE

trauma registry course

The American Trauma Society's Trauma Registry Course has been recognized by the American College of Surgeons in the Resources for Optimal Care of the Injury Patient since 1999 as an avenue for comprehensive trauma registry training.

EMS Medical Directors' Conference



EMS
Medical Directors'
Conference

Friday, April 27, 2018

Ritz Charles 12156 N. Meridian Street Carmel, IN 46032

8am - 5pm



Get notified when registration opens!

Send your contact information to: indianatrauma@isdh.in.gov









Outreach Presentation



It's a disease.

#KnowTheOFacts



2

There is treatment.

#KnowTheOFacts



Opioid Treatment Programs in Indiana

- > Currently 13
- > 5 more planned in 2018







Recovery is possible.

#KnowTheOFacts





KnowTheOFacts.org

Regional trauma meetings

All regional trauma meeting dates on the website:

http://www.in.gov/isdh/26644.htm.

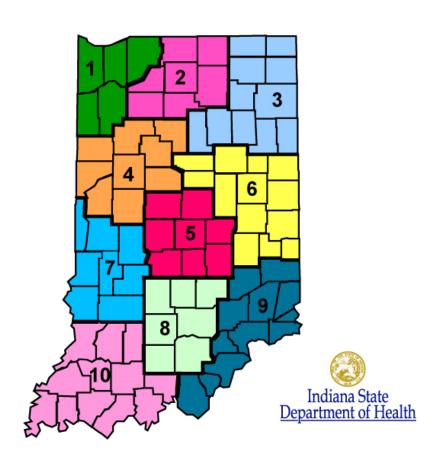


Regional Updates



Regional updates

- District 3
- District 4
- District 5
- District 6
- District 7
- District 10
- District 1



Trauma System Sustainability

Jennifer Homan



State Statistics

Trauma is:

- Leading cause of death for people age 1-44
- 5th leading cause overall(ISDH, 2017)

Mortality statistics

- 2014:
 - 4,421 injury deaths
 - 941 suicide and 363 died from homicide(ISDH, 2017)

Financial Burden

 Medical and work loss lifetime costs for unintentional injury exceed \$2.5 billion(ISDH, 2017)

Understanding Injury and Violence

Access to Services

Physical environment

Social Environment

Individual behaviors

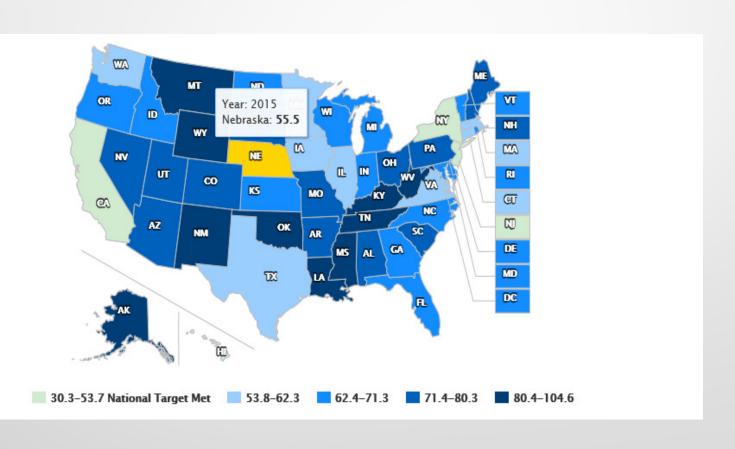
10 Leading Causes of Death by Age Group, United States – 2015

| | Age Groups | | | | | | | | | | |
|------|---|---|--|---|--|-----------------------------------|-----------------------------------|---|--|---|---|
| Rank | <1 | 1-4 | 5-9 | 10-14 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | Total |
| 1 | Congenital Anomalies 4,825 | Unintentional Injury 1,235 | Unintentional Injury 755 | Unintentional Injury 763 | Unintentional Injury 12,514 | Unintentional Injury 19,795 | Unintentional Injury 17,818 | Malignant Neoplasms 43,054 | Malignant Neoplasms 116,122 | Heart Disease 507,138 | Heart Disease 633,842 |
| 2 | Short Gestation 4,084 | Congenital Anomalies 435 | Malignant Neoplasms 437 | Malignant Neoplasms 428 | Suicide 5,491 | Suicide 6,947 | Malignant Neoplasms 10,909 | Heart Disease 34,248 | Heart Disease 76,872 | Malignant Neoplasms 419,389 | Malignant Neoplasms 595,930 |
| 3 | SIDS 1,568 | Homicide 369 | Congenital Anomalies 181 | Suicide 409 | Homicide 4,733 | Homicide 4,863 | Heart Disease 10,387 | Unintentional Injury 21,499 | Unintentional Injury 19,488 | Chronic Low. Respiratory Disease 131,804 | Chronic Low. Respiratory Disease 155,041 |
| 4 | Matemal Pregnancy Comp. 1,522 | Malignant Neoplasms 354 | Homicide 140 | Homicide 158 | Malignant Neoplasms 1,469 | Malignant Neoplasms 3,704 | Suicide 6,936 | Liver Disease 8,874 | Chronic Low. Respiratory Disease 17,457 | Cerebro- vascular 120,156 | Unintentional Injury 146,571 |
| 5 | Unintentional Injury 1,291 | Heart Disease 147 | Heart Disease 85 | Congenital Anomalies 156 | Heart Disease 997 | Heart Disease 3,522 | Homicide 2,895 | Suicide 8,751 | Diabetes Mellitus 14,166 | Alzheimer's Disease 109,495 | Cerebro- vascular 140,323 |
| 6 | Placenta Cord. Membranes 910 | Influenza & Pneumonia 88 | Chronic Low. Respiratory Disease 80 | Heart Disease 125 | Congenital Anomalies 386 | Liver Disease 844 | Liver Disease 2,861 | Diabetes Mellitus 6,212 | Liver Disease 13,278 | Diabetes Mellitus 56,142 | Alzheimer's Disease 110,561 |
| 7 | Bacterial Sepsis 599 | Septicemia 54 | Influenza & Pneumonia 44 | Chronic Low Respiratory Disease 93 | Chronic Low Respiratory Disease 202 | Diabetes Mellitus 798 | Diabetes Mellitus 1,986 | Cerebro- vascular 5,307 | Cerebro- vascular 12,116 | Unintentional Injury 51,395 | Diabetes Mellitus 79,535 |
| 8 | Respiratory Distress 462 | Perinatal Period 50 | Cerebro- vascular 42 | Cerebro- vascular 42 | Diabetes Mellitus 196 | Cerebro- vascular 567 | Cerebro- vascular 1,788 | Chronic Low. Respiratory Disease 4,345 | Suicide 7,739 | Influenza & Pneumonia 48,774 | Influenza & Pneumonia 57,062 |
| 9 | Circulatory System Disease 428 | Cerebro- vascular 42 | Benign Neoplasms 39 | Influenza & Pneumonia 39 | Influenza & Pneumonia 184 | HIV 529 | HIV 1,055 | Septicemia 2,542 | Septicemia 5,774 | Nephritis 41,258 | Nephritis 49,959 |
| 10 | Neonatal Hemorrhage 406 | Chronic Low Respiratory Disease 40 | Septicemia 31 | Two Tied: Benigh Neo./Septicemia 33 | Cerebro- vascular 166 | Congenital Anomalies 443 | Septicemia 829 | Nephritis 2,124 | Nephritis 5,452 | Septicemia 30,817 | Suicide 44,193 |

Data Source: National Vital Statistics System , National Center for Health Statistics, CDC. **Produced by:** National Center for Injury Prevention and Control, CDC using WISQ ARS™.



Injury Deaths

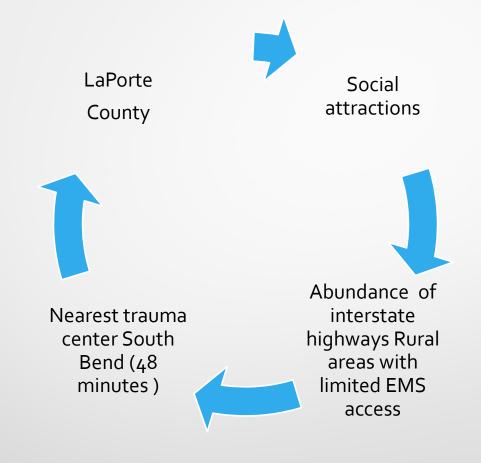


Indiana Trauma Care Elements of the System



| Health outcome | Indiana | Lake | LaPorte | Porter | Starke | Newton |
|--------------------------------|---------|------|---------|--------|--------|--------|
| Alcohol related driving deaths | 24% | 32% | 34% | 30% | 22% | 21% |
| Injury Deaths | 67 | 63 | 73 | 68 | 107 | 74 |
| Violent Crime | 356 | 432 | 173 | 102 | 100 | 82 |

Alcohol Related Driving Deaths



Indiana Trauma Center Access: Areas Within a 45-Minute Drive

45-Minute Accessible Trauma Center *

45-Minute Accessible Areas

Average Travel Time

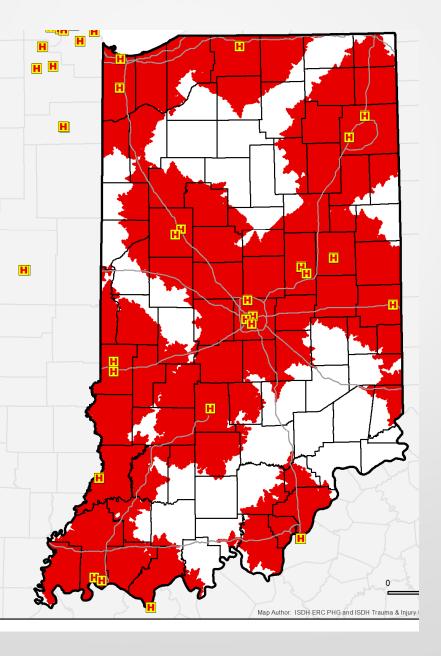
based on posted and historical speeds

| | 45-Minute | State | |
|-------------|-----------|------------|-----------|
| | (at avera | Total | |
| | n | % of state | n |
| Land Area | 22,081 | 62% | 35,826 |
| Land Area | sq mi | 62% | sq mi |
| Population | 5,501,274 | 85% | 6,483,802 |
| Population | people | 85% | people |
| Interstates | 1,125 | 91% | 1,239 |
| interstates | miles | 91% | miles |

* Considered a trauma center for purposes of the triage and transport rule.

Travel times are calculated with 2016 Indiana street network reference data published by Esri. Travel times do not take into account current traffic volume or restrictions. Population and land area are calculated from the 2010 U.S. Census block summary geography. Interstate mileage is calculated using a single direction of a divided highway (source: INDOT). All statistics should be considered an estimate.

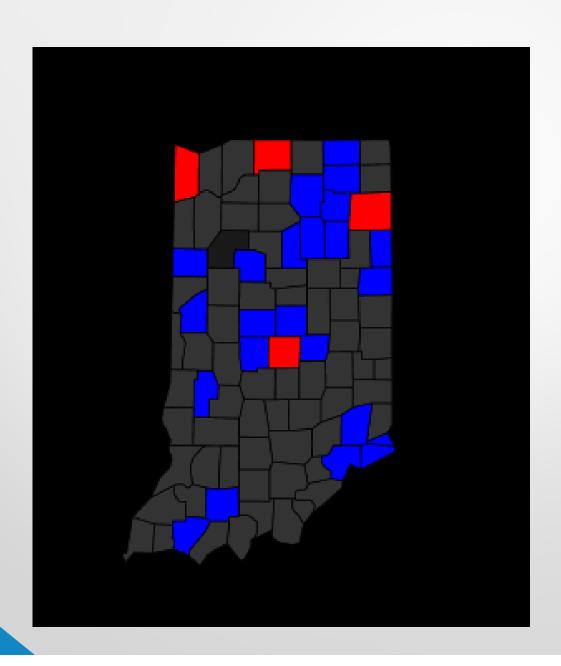




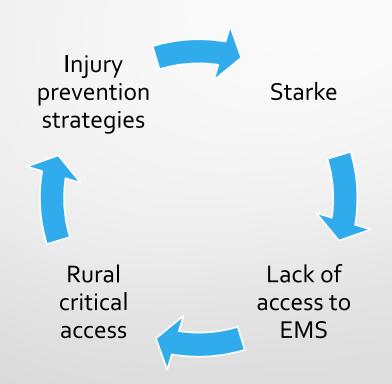
Violent Crimes



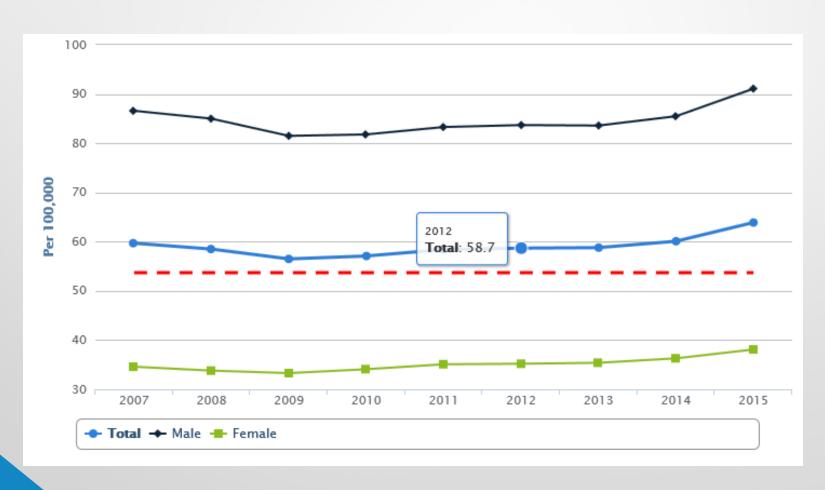
Homicide



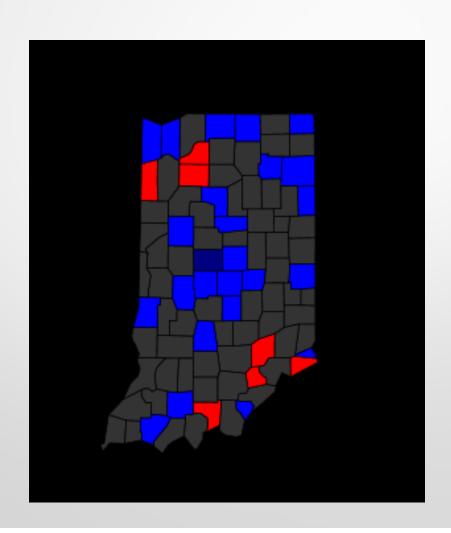
Injury Death Rates



Healthy People 2020 Goal



Accidents



Suicide

1

Number of Deaths by Suicide 948 Indiana 2

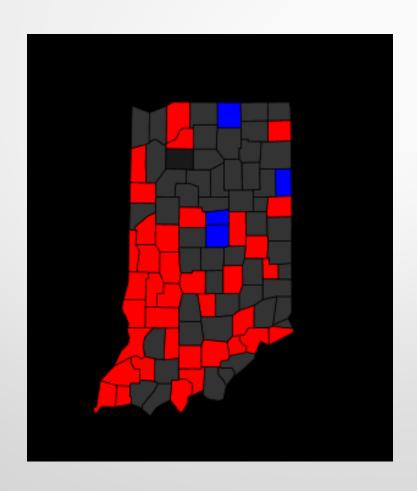
Rate per 100,000 Population

- Indiana rate 14.25
- National rate 12.93

3

State Rank Indiana 26

Suicide Rates



Unintentional Injury

From 2011 to 2015, 21,837 Hoosiers died from injuries, averaging 12 deaths each day. 2015 3,258 deaths from unintentional injuries occurred.

69% of the injury deaths were unintentional (accidental)

20% of the deaths resulted from suicide

8% from homicide

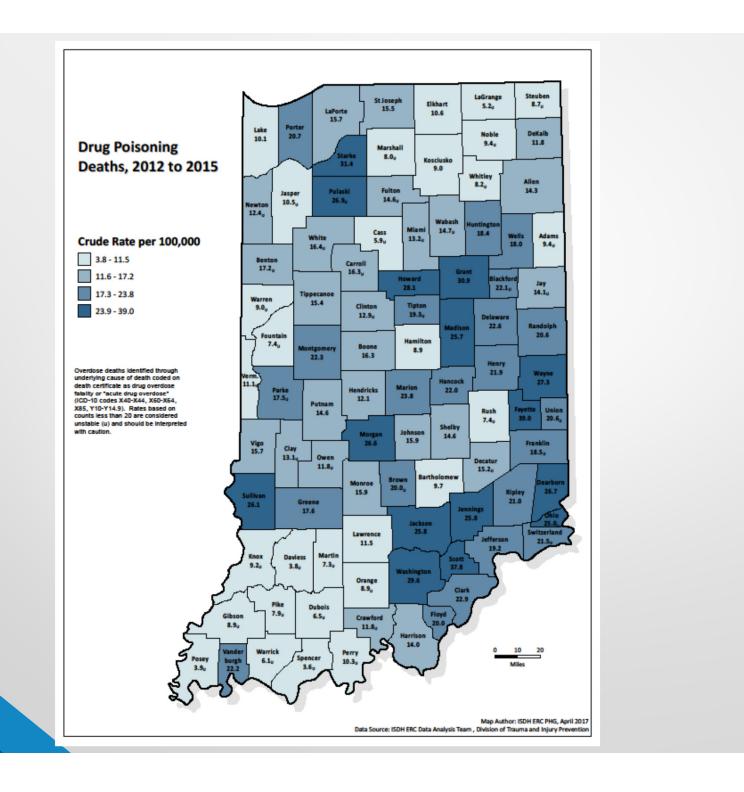
3% were of undetermined intent

Drug Overdose Rates

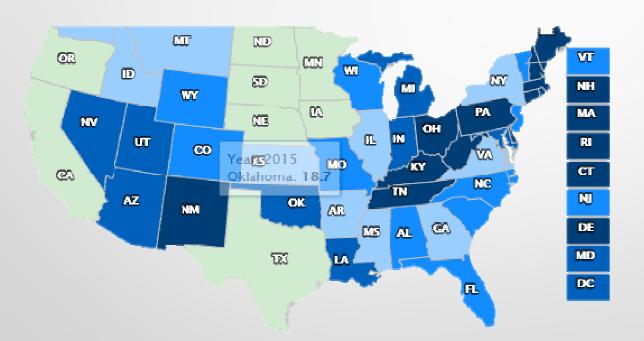
Social economic factors

Prescribing practices

Availability of resources



Poisonings



| Health outcome | Indian a | Lake | LaPort e | Porter | Starke | Newto n |
|-------------------------------|-------------|-------|-------------|--------|-------------|--------------|
| Mental health providers | 730:1 | 650:1 | 1,270:1 | 700:1 | 4,590: 1 | 14,010: 1 |





Policy Goals

- Purpose and goals of policy
 - To increase access to trauma care to include
 - EMS access
 - Emergency and specialty care access to include access to specialty physician services
 - Rehab care
 - To develop a sustainable trauma system
 - To facilitate public health initiates such as:
 - Automobile Passenger safety
 - Violence prevention programs
 - Infant mortality education
 - Suicide prevention
 - Overdose prevention

Funding Options

Increasing the tobacco tax

Assessing a surcharge on drivers' licenses or renewal of automobile license tags

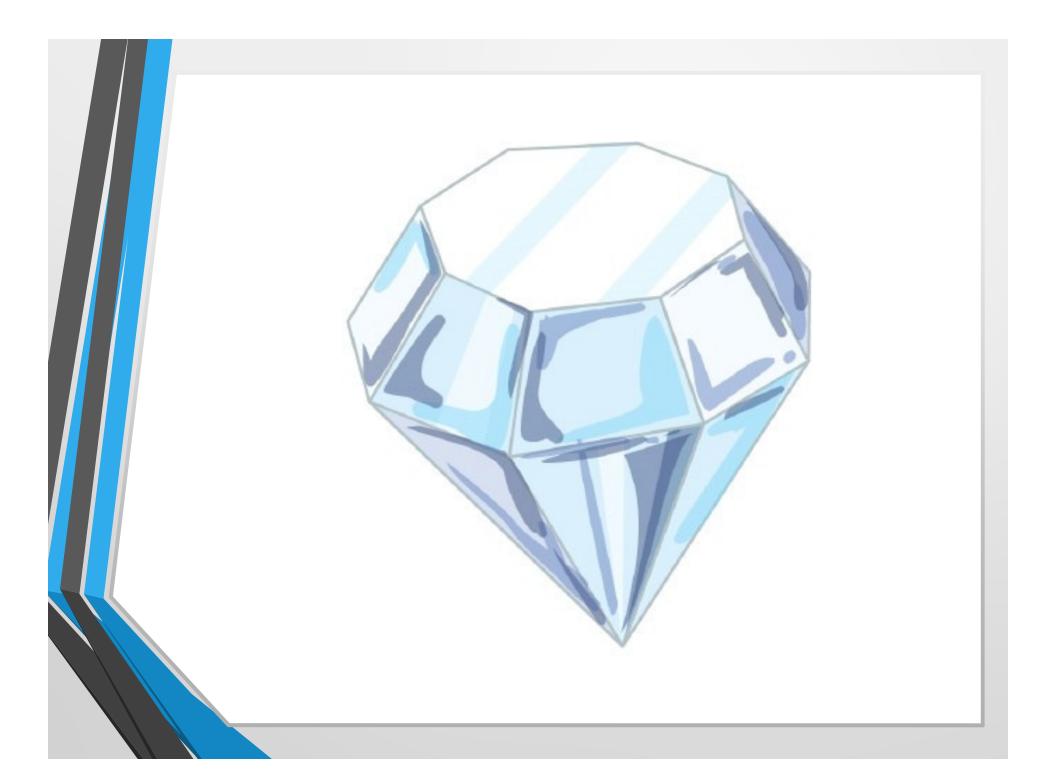
Increasing or adding extra fines on DUI or other motor vehicle violations

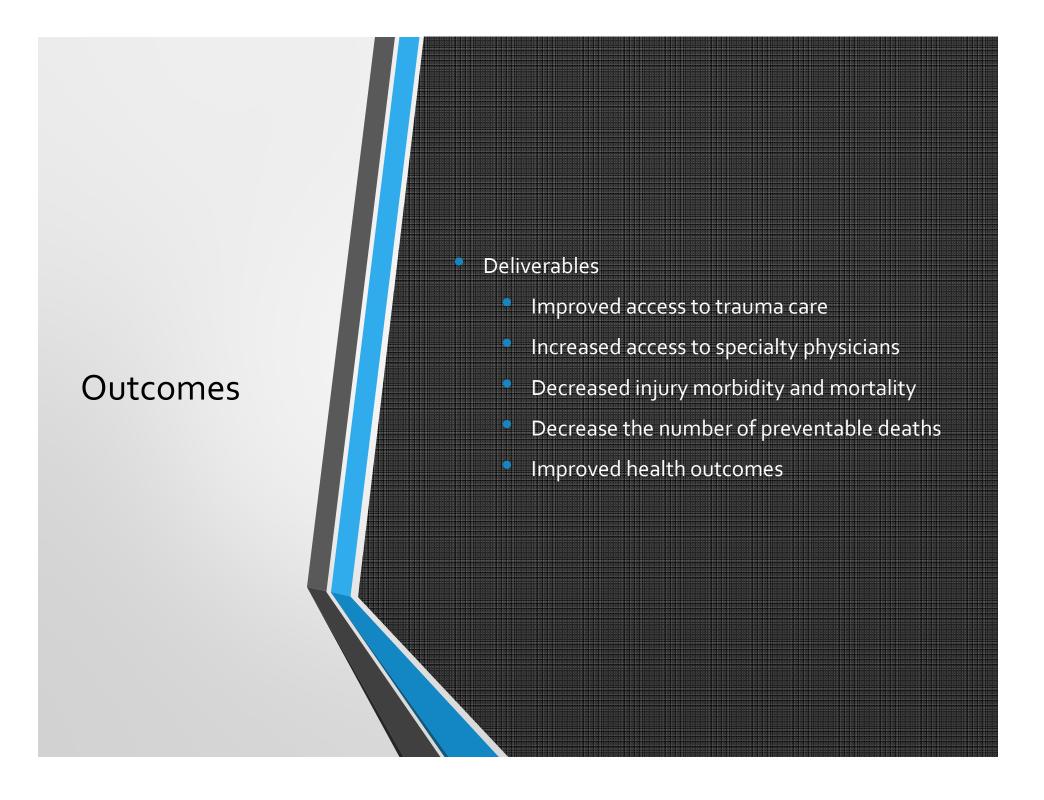
Allocations from tobacco settlement

Permitting voters to decide to increase the county sales tax with these funds exclusively allocated to trauma care

Play or pay rules

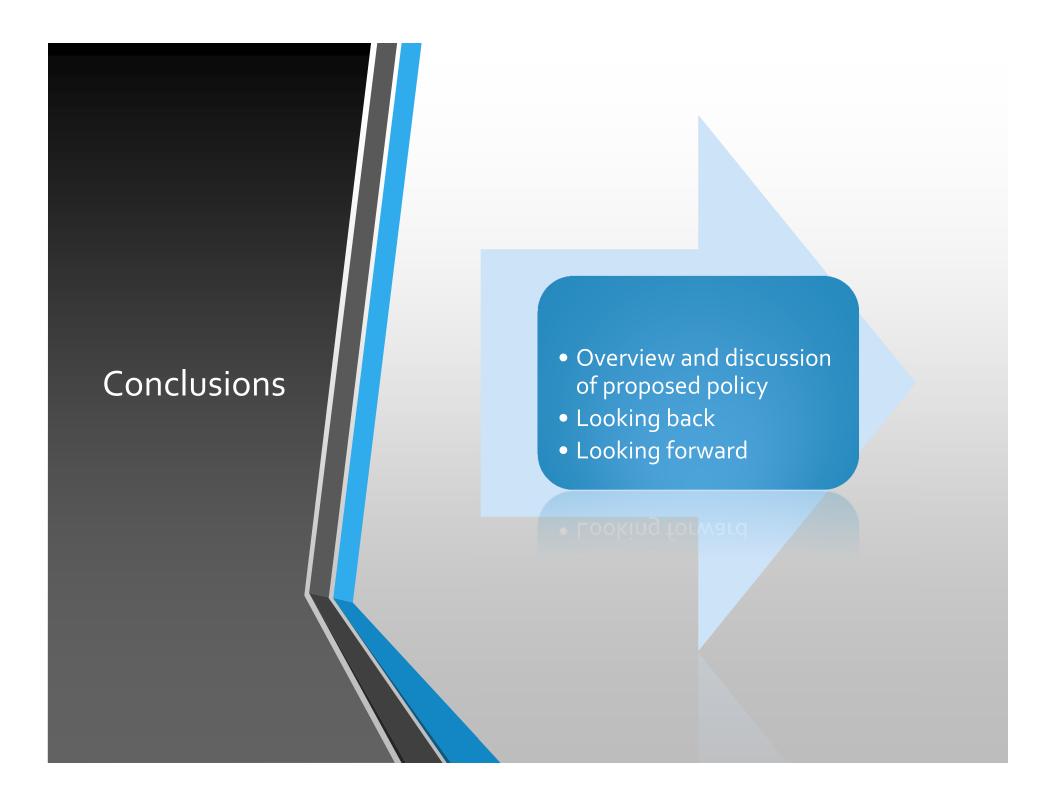
Gaming tax applied to trauma fund

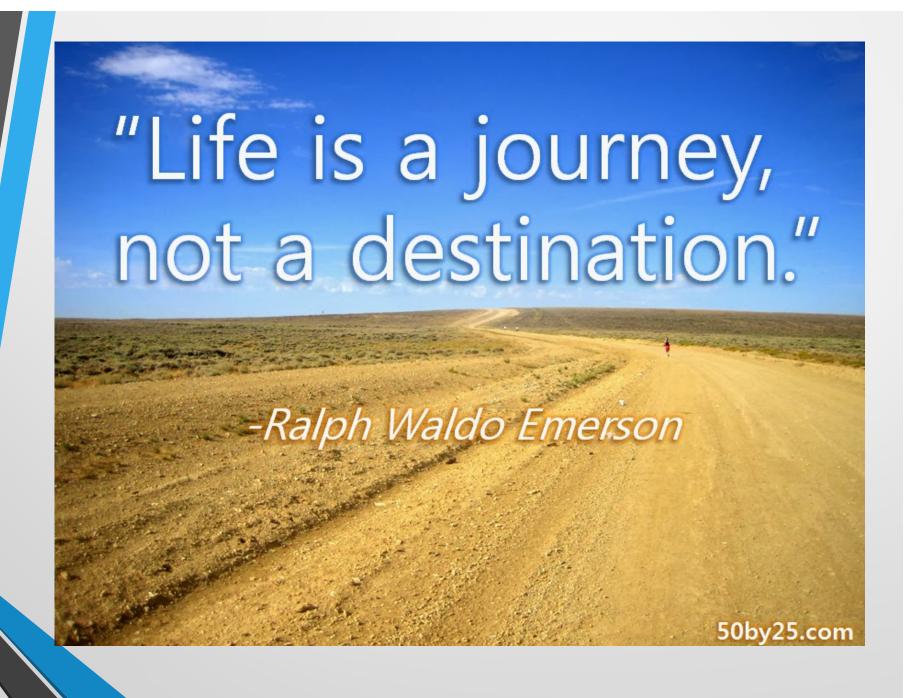




Next Steps

- Define an add hoc team to work on policy proposal
- Hold state lobby day
- Speak to representatives
- Prepare more information sessions





References

Indiana State Board of Health(ISDH), (2017). Trauma system/injury prevention program. Retrieved from https://secure.in.gov/isdh/19537.htm

Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER), (2013) A descriptive review of the Mississippi Trauma Care Systems Fund.

Retrieved from http://www.peer.ms.gov/reports/rpt568.pdf

References

Society of Gastroenterology Nurses and Associates, (2012). Understanding and

Influencing the legislative Process. Retrieved from

https://www.sgna.org/Portals/o/Education/PDF/Standards-

<u>Guidelines/LegislativeStandard_FINAL.pdf</u>

Lanier, J., (2014). The ABCs of Effective Advocacy: Attention, bipartisanship, & collaboration independent study. *Ohio Nurses Review*, 89(5), 24-32.

Subcommittee Update **Designation Subcommittee**

Dr. Lewis Jacobson, Trauma Medical Director

St. Vincent Indianapolis Hospital



Elkhart General Hospital

- Located: Elkhart
- Seeking: Level III adult trauma center status
- Application was reviewed and the following issues were identified:
 - Tiered activation system.
 - In-house emergency physician coverage.
 - Orthopedic surgery
 - Critical care physician coverage
 - Blood Bank
 - PACU
 - Diversion policy
- Consultation & Verification Visits: TBD



"In the Process" of ACS Verification Trauma Centers

| Facility Name | City | Level | Adult / Pediatric | "In the Process" Date* | 1 Year Review Date** | ACS Consultation Visit Date | ACS Verification Visit Date |
|---|--------|-------|----------------------|------------------------------|-------------------------|-----------------------------------|--------------------------------|
| Memorial Hospital & Health Care Center | Jasper | III | Adult | 08/24/2016 | October 2017 | 05/16-05/17, 2017 | 05/15-05/16, 2018 |

^{*}Date the EMS Commission granted the facility "In the process" status

Facility is past the two year mark for their "In the Process" status.

Email questions to: indianatrauma@isdh.in.gov

^{**}Date the Indiana State Trauma Care Committee (ISTCC) reviewed/reviews the 1 year review documents. This date is based on the first ISTCC meeting after the 1 year date.

Subcommittee Update Performance Improvement Subcommittee

Dr. Stephanie Savage, *Trauma Medical Director* IU Health Methodist



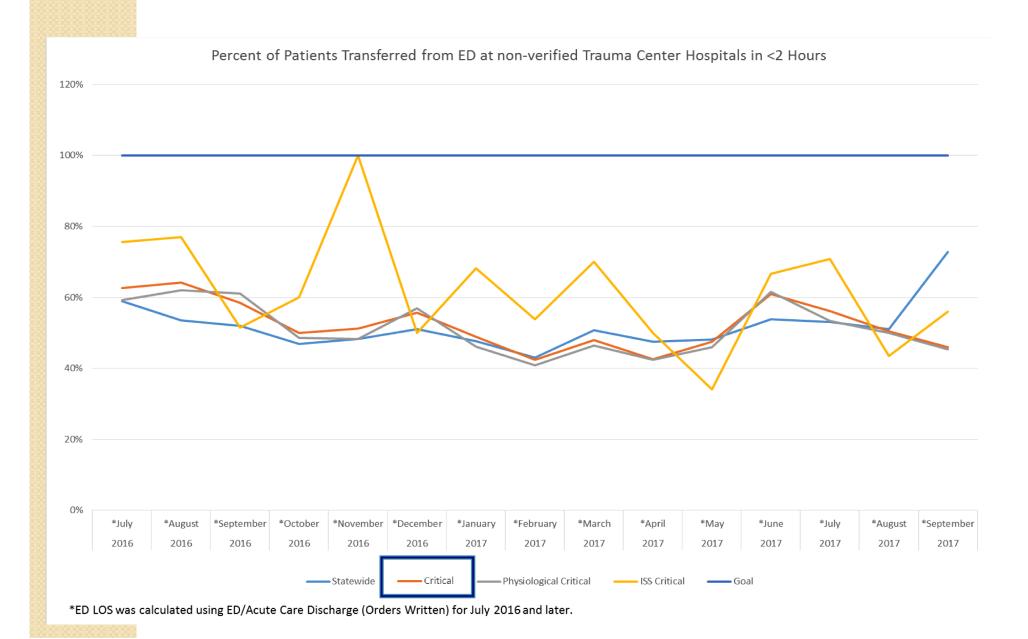
Email questions to: indianatrauma@isdh.in.gov

ISDH Performance Improvement Subcommittee December 2017 update

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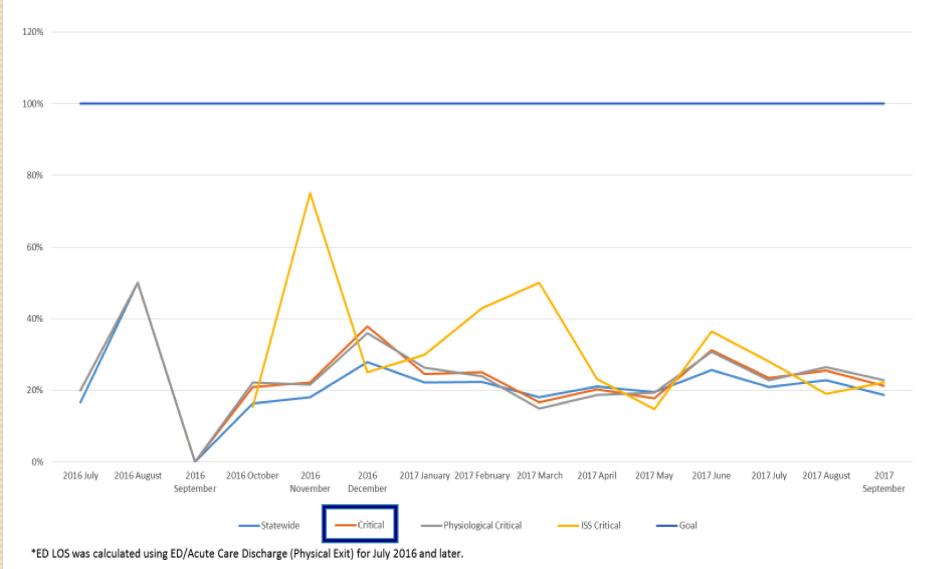
Meeting January 2018

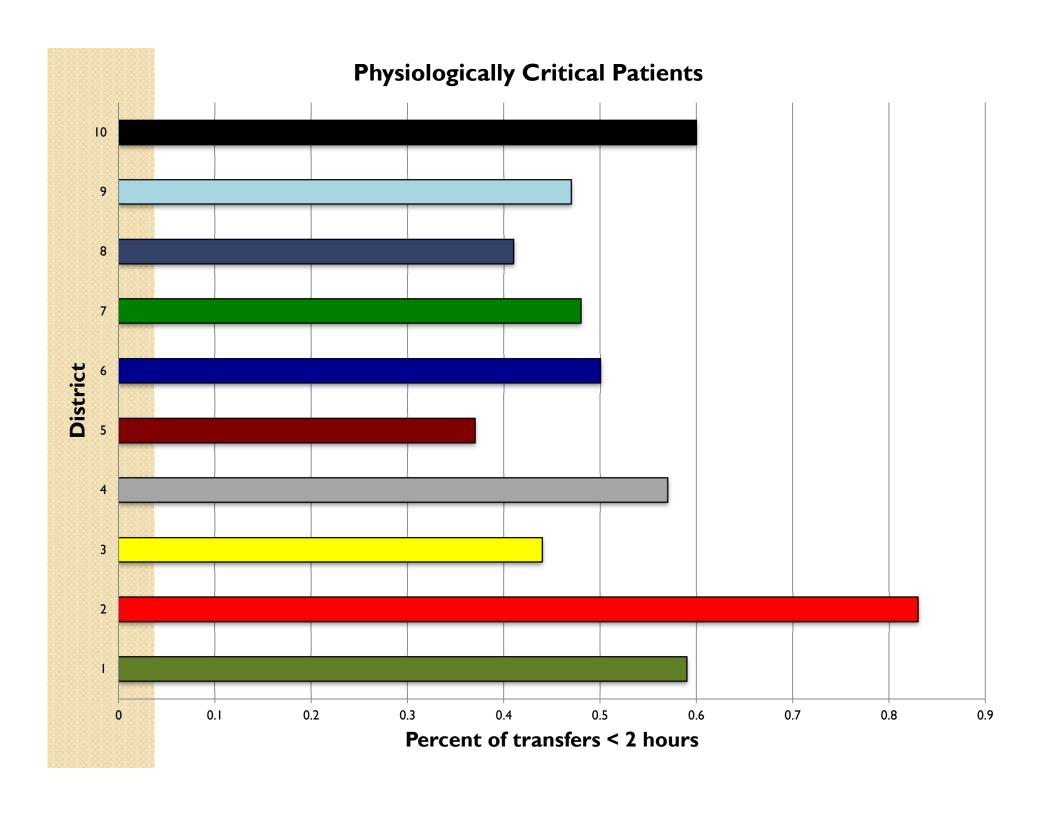
Transfers – Time to orders written

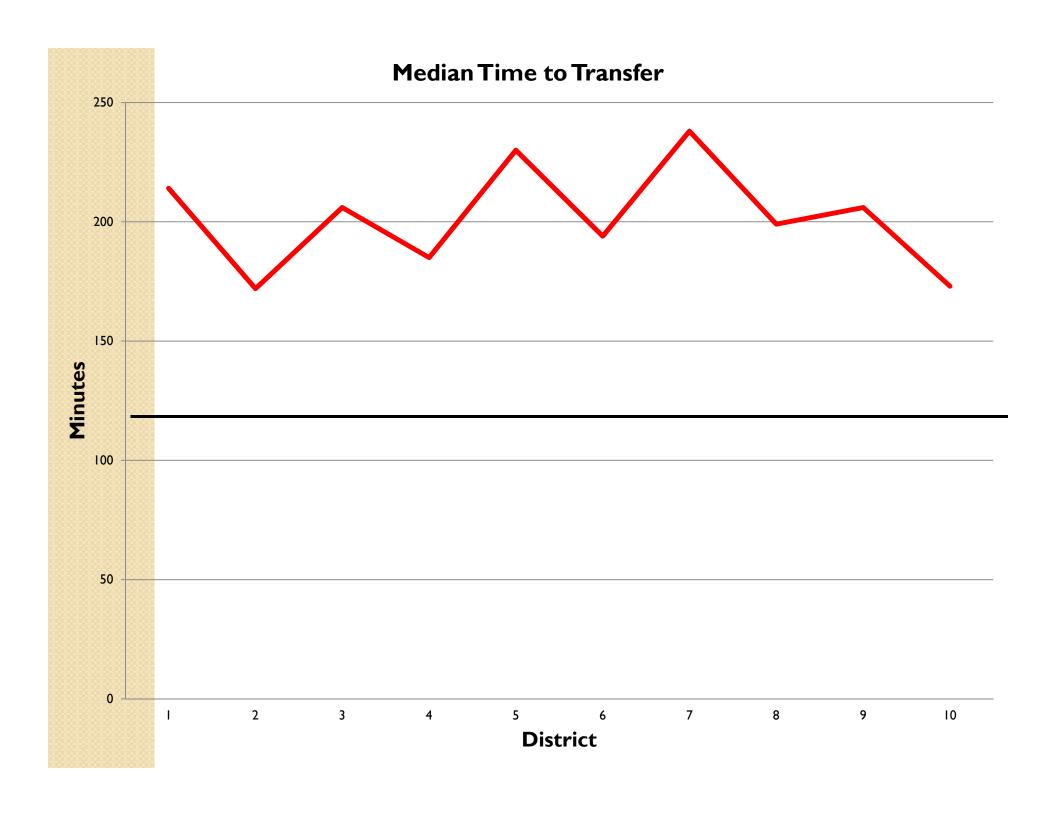


Transfers – Time to ED departure

Percent of Patients Transferred from ED at non-verified Trauma Center Hospitals in <2 Hours







Barriers to Transfer

- 1. EMS (ACLS) availability
- 2. District-specific reasons

Proposed Action

- 1. District meeting initiative
- 2. Discussion with aeromedical working group about appropriate utilization of air resources
- 3. State ED LOS letters will include site TPM or representative
- 4. Continued use of expanded transfer delay project (15)

Ongoing Initiatives

Registry Quiz participation
35% in most recent sampling
Pravy will start sharing response rate/district

EMS run sheets

Non-transfer of severely injured patients

Dr. Jenkins project

Trauma system planning subcommittee update

Dr. Matthew Vassy, Trauma Medical Director

Deaconess Hospital



Email questions to: indianatrauma@isdh.in.gov

Pediatric Facility Recognition

Elizabeth Weinstein, MD
Associate Professor of Clinical Pediatrics and
Emergency Medicine
IU School of Medicine
Director Indiana EMSC



EMSC

Federal Program to reduce pediatric morbidity and mortality as a result of serious injury and illness.



EMSC

Integrate pediatric preparedness:

- Skills
- Equipment
- Resources
- Planning

into our existing infrastructures.



2006 Report "Growing Pains"

"Unfortunately, although children make up 27 percent of all visits to the ED, many hospitals and EMS agencies are not well equipped to handle these patients."





Consider...

- 83% of children are seen in community hospitals
- 69% of hospitals see < 15 kids/day
- The FEWER kids you see, the MORE READY you need to be!





FROM THE AMERICAN ACADEMY OF PEDIATRICS

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

Joint Policy Statement—Guidelines for Care of Children in the Emergency Department

AMERICAN ACADEMY OF PEDIATRICS
COMMITTEE ON PEDIATRIC EMERGENCY MEDICINE
AMERICAN COLLEGE OF EMERGENCY PHYSICIANS
PEDIATRIC COMMITTEE
EMERGENCY NURSES ASSOCIATION
PEDIATRIC COMMITTEE

abstract

Children who require emergency care have unique needs, especially when emergencies are serious or life-threatening. The majority of ill and injured children are brought to community hospital emergency departments

2009 Policy Statement



2009 Guidelines for Care of Children in the Emergency Department

- 1. Administration and Coordination
- 2. Physicians, Nurses, and Other Healthcare Providers
- 3. Quality Improvement
- 4. Patient Safety
- 5. Policies, Procedures, and Protocols
- 6. Support Services
- 7. Equipment, Supplies, and Medications



Pediatric Readiness Project

- Coordinated effort to benchmark and improve pediatric care for children nationally
- Combined effort ENA/ACEP/AAP/EMSC



2013 National Survey

- Coordinated through EMSC programs
- Comprehensive web-based assessment
- Compliance with 2009 guidelines
- 5107 hospitals, 83% response rate! (87.6% in Indiana)
- Weighted scale 0-100



Assessment Tool

- 189 Items on the assessment
- 82 Items Scored for "Pediatric Readiness"
- Perfect Score = 100

- 6 Major Sections
 - Coordination (19 pts)
 - Staffing (10 pts)
 - QI/PI (7 pts)
 - Safety (14 pts)
 - Policies (17 pts)
 - Equipment (33 points)



Indiana Results (INFLATED)

Number of Hospital Respondents: 106

Number of Hospitals Assessed: 121

Response Rate: 87.6%

STATE SCORE AND COMPARATIVE SCORES:

66

STATE AVERAGE HOSPITAL SCORE OUT OF 100 67

STATE MEDIAN HOSPITAL SCORE OUT OF 100 69

n = 4,143 NATIONAL MEDIAN OF PARTICIPATING HOSPITALS



National Pediatric Readiness Project: Overall Results

| Key Guidelines Recommendations | All EDs |
|---------------------------------------|--------------|
| Pediatric QI Process | 1867 (45.1%) |
| Pediatric Disaster Plan | 1938 (46.8%) |
| Interfacility Transfer Guidelines | 1952 (50.0%) |
| Interfacility Transfer Agreements | 2595 (66.5%) |
| Weigh only in Kg | 2802 (67.7%) |
| Physician PECC | 1966 (47.5%) |
| Nurse PECC | 2455 (59.3%) |



The Big Secret



Where do we fall short?



Uh huh, Big Deal...

 Most COMMON and PREVENTABLE cause of harm in pediatric patients are medication errors.

Pediatric meds are DOSED in KG

Emergency Nurses Association. Weighing Pediatric Patients in Kilograms. 2012 Position Statement Hughes, R., and Edgerton, E. (2005). First, do no harm. American Journal of Nursing. 105; 5, 79-84.



Uh huh, Big Deal...

"A 2009 analysis of 479 medication errors involving wrong weights discovered that over 25% were due to 'confusion between pounds and kilograms."

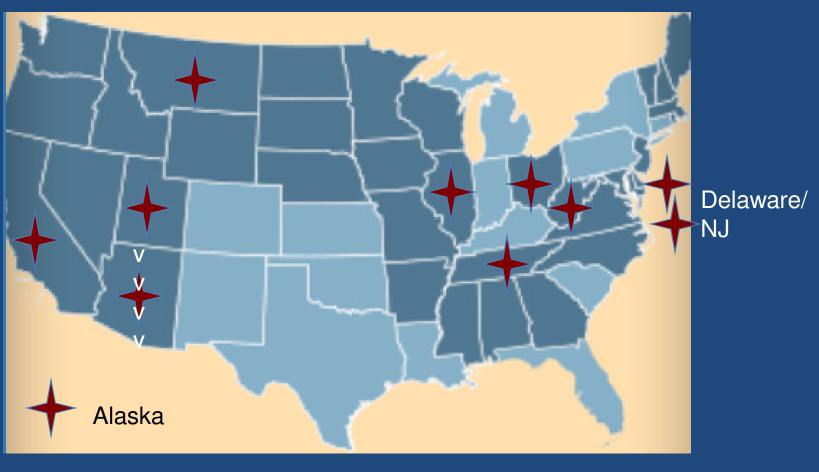
Emergency Nurses Association. Weighing Pediatric Patients in Kilograms. 2012 Position Statement. Pennsylvania Patient Safety Authority (2009). Medication errors: significance of accurate patient weights. Pennsylvania Patient Safety Advisory, 6:1, 10-15



Pediatric Readiness & Facility Recognition



Facility Recognition





FRC Nationally

- Wide variation in # levels
- High degree of agreement of individual criteria



Illinois

- 3-tiered process in place since 1998
- In partnership with IDPH
- 110 of 185 hospitals participate
 - PCCC (Pediatric Critical Care Center) 10
 - EDAP (Emergency Department Approved for Pediatrics) – 87
 - SEDP (Standby Emergency Department Approved for Pediatrics) – 13



Illinois

Hospital utilization

- In 2013, ~ 1 million ED visits 0-15 y/o
- 78% of visits to a Recognized Hospital
- 30,000 visits required inpatient admission
- 94% admitted to recognized hospital



Indiana's Process

Established workgroup

Local and National outreach Iterative development of criteria/levels

Consensus Conference

Revision

Final Approval pending



Indiana's Facility Recognition Work Group

- ISDH
- IRHA
- IHA
- ACEP
- AAP
- Indianapolis PatientSafety Coalition

- ENA
- Pediatric Intensivists
- Pediatric Hospitalists
- Pediatric EM

National working group partnerships; 18 month iterative process



Indiana's Process

Established workgroup

Local and National outreach Iterative development of criteria/levels

Consensus Conference

Revision

Final Approval pending



Facility Recognition Indiana

- 2-Tiered Process*
 - Pediatric Ready
 - Minimal preparedness to treat, stabilize and transfer as needed
 - Pediatric Advanced
 - Pediatric Ready with additional resources to care for children
 - * Development of 3rd Tier under consideration



Facility Recognition Indiana

- Organized in 7 Domains
- VOLUNTARY
- Reverification every 3 to 4 years



Domain 1: Administration and Coordination



Domain 2: Health Provider Standards



Domain 3: Quality Improvement



Domain 4: Patient Safety



Domain 5: Polices, Procedures, and Protocols



Domain 6: Support Services



Domain 7: Equipment



Site Verification Process

- 1. Hospital expresses interest, receives application
- 2. Hospital completes and submits application
- 3. Application is reviewed by 2 team members
- 4. Written feedback, including gaps provided within 90 days of submission. If meets criteria, scheduled for site visit.
- 5. ½ day site visit
- 6. Formal written feedback within 60 days
- 7. Hospital given 90 days to address any deficiencies



Timeline Moving Forward



Questions? elweinst@iu.edu



Resources

- EMSC Newsletter/PECC Community
- www.pediatricreadiness.org
- https://www.ena.org/SiteCollectionDocuments/Position %20Statements/WeighingPedsPtsinKG.pdf



2018 ISTCC & ITN Meetings

- Location: Indiana
 Government Center –
 South, Conference
 Room B.
- Webcast still available.
- Time: 10:00 A.M. EST.

- Dates:
 - April 20
 - June 15
 - August 17
 - October 19
 - December 14

Other Business



Email questions to: indianatrauma@isdh.in.gov